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     (FILE 'HOME' ENTERED AT 19:12:36 ON 19 SEP 2002)

     FILE 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH' ENTERED AT 19:12:45 ON 19 SEP
     2002
L1         23794 S CARDIOMYOCYTE
L2        276418 S CORONARY(W)(ARTERY OR SINUS)
L3          6372 S AAV OR ADENO-ASSOCIATED(3A)VECTOR
L4             5 S L1 AND L2 AND L3
L5             3 DUP REM L4 (2 DUPLICATES REMOVED)

=> d bib ab 1-3 l5

L5   ANSWER 1 OF 3  BIOSIS  COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN   2002:263208  BIOSIS
DN   PREV200200263208
TI   Localized delivery of adeno-associated virus
     vector expressing human extracellular superoxide dismutase gene
     confers long term protection against ischemia-reperfusion injury to the
     rat heart.
AU   Agrawal, Reitu S. (1); Muangman, Suphichaya; Melo, Luis G.; Layne,
Matthew
     D.; Lopez-Ilasaca, Marco; Perrella, Mark A.; Lee, Richard T.; Zhang,
     Lunan; Dzau, Victor J.
CS   (1) Brigham and Women's Hosp, Boston, MA USA
SO   Circulation, (October 23, 2001) Vol. 104, No. 17 Supplement, pp. II.36.
     http://circ.ahajournals.org/. print.
     Meeting Info.: Scientific Sessions 2001 of the American Heart Association
     Anaheim, California, USA November 11-14, 2001
     ISSN: 0009-7322.
DT   Conference
LA   English

L5   ANSWER 2 OF 3  CAPLUS  COPYRIGHT 2002 ACS
AN   2000:456818  CAPLUS
DN   133:53712
TI   Efficient and stable in vivo gene transfer to cardiomyocytes
     using recombinant adeno-associated virus
     vectors
IN   Leiden, Jeffrey M.; Svensson, Eric
PA   Arch Development Corp., USA
SO   PCT Int. Appl., 20 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.         KIND  DATE           APPLICATION NO.  DATE
     ---------------    ----  --------       ---------------  --------
PI   WO 2000038518      A1    20000706       WO 1999-US31093  19991228
         W:  AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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EP 1139751 A1 20011010 EP 1999-967703 19991228
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
PRAI US 1998-113923P P 19981228
WO 1999-US31093 W 19991228
AB Recombinant **adeno-assocd**. virus (rAAV) **vectors** are used to transduce **cardiomyocytes** in vivo by infusing the rAAV into a **coronary artery** or **coronary sinus**. RAAV infection is not assocd. with detectable myocardial inflammation or myocyte necrosis. Thus, rAAV is a useful vector for the stable expression of therapeutic genes in the myocardium and can be used to deliver genes for inducing angiogenesis, inhibiting angiogenesis, stimulating cell proliferation, inhibiting cell proliferation and/or treating or ameliorating other cardiovascular conditions.
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 3 MEDLINE DUPLICATE 1
AN 1999110721 MEDLINE
DN 99110721 PubMed ID: 9892583
TI Efficient and stable transduction of **cardiomyocytes** after intramyocardial injection or intracoronary perfusion with recombinant **adeno-associated** virus **vectors**.
AU Svensson E C; Marshall D J; Woodard K; Lin H; Jiang F; Chu L; Leiden J M
CS Departments of Medicine and Pathology, University of Chicago, Chicago, IL 60637, USA.
NC AR-42885 (NIAMS)
DK-48987 (NIDDK)
HL-54592 (NHLBI)
SO CIRCULATION, (1999 Jan 19) 99 (2) 201-5.
Journal code: 0147763. ISSN: 1524-4539.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 199902
ED Entered STN: 19990311
Last Updated on STN: 20010521
Entered Medline: 19990223
AB BACKGROUND: The delivery of recombinant genes to **cardiomyocytes** holds promise for the treatment of a variety of cardiovascular diseases. Previous gene transfer approaches that used direct injection of plasmid DNA or replication-defective adenovirus vectors have been limited by low transduction frequencies and transient transgene expression due to immune responses, respectively. In this report, we have tested the feasibility of using intramyocardial injection or intracoronary infusions of recombinant **adeno-associated** virus (rAAV) **vectors** to program transgene expression in murine **cardiomyocytes** in vivo.
METHODS AND RESULTS: We constructed an rAAV containing the LacZ gene under the transcriptional control of the cytomegalovirus (CMV) promoter (AAVCMV-LacZ). We then injected 1x10(8) infectious units (IU) of this virus into the left ventricular myocardium of adult CD-1 mice. Control hearts were injected with the AdCMV-LacZ adenovirus vector. Hearts harvested 2, 4, and 8 weeks after AAVCMV-LacZ injection demonstrated stable beta-galactosidase (beta-gal) expression in large numbers of **cardiomyocytes** without evidence of myocardial inflammation or myocyte necrosis. In contrast, the AdCMV-LacZ-injected hearts displayed transient beta-gal expression, which was undetectable by 4 weeks after

injection. Explanted C57BL/6 mouse hearts were also perfused via the **coronary arteries** with 1.5x10(9) IU of AAVCMV-LacZ and assayed 2, 4, and 8 weeks later for beta-gal expression. beta-Gal expression was detected in <1% of **cardiomyocytes** at 2 weeks after perfusion but was detected in up to 50% of **cardiomyocytes** 4 to 8 weeks after perfusion. CONCLUSIONS: Direct intramyocardial injection or **coronary artery** perfusion with rAAV vectors can be used to program stable transgene expression in **cardiomyocytes** in vivo. rAAV appears to represent a useful vector for the delivery of therapeutic genes to the myocardium.

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L3	aav or adeno-associated near3 vector	2182	L3
L2	coronary adj (artery or sinus)	12488	L2
L1	cardiomyocyte	530	L1

END OF SEARCH HISTORY

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Search Results - Record(s) 1 through 20 of 30 returned.

☐ 1. 20020132753 . 17 Jan 01. 19 Sep 02. Nucleic acids, proteins, and antibodies. Rosen, Craig A., et al. 514/1; 435/320.1 435/325 435/6 435/69.1 536/23.1 A61K031/00 C12Q001/68 C07H021/02.

☐ 2. 20020120103 . 27 Jul 01. 29 Aug 02. 17 human secreted proteins. Rosen, Craig A., et al. 530/350; 435/320.1 435/325 435/6 435/69.1 530/388.1 536/23.5 C12Q001/68 C07K014/435 C07H021/04 A61K038/17 C12P021/02 C12N005/06.

☐ 3. 20020098541 . 17 Apr 01. 25 Jul 02. TNFR related gene 12. Ni, Jian, et al. 435/69.1; 435/320.1 435/325 435/6 530/350 536/23.5 C12Q001/68 C07H021/04 C12P021/02 C12N005/06 C07K014/705.

☐ 4. 20020090673 . 17 Jan 01. 11 Jul 02. Nucleic acids, proteins, and antibodies. Rosen, Craig A., et al. 435/69.1; 435/320.1 435/325 435/6 536/23.1 C12Q001/68 C07H021/04 C12P021/02 C12N005/06 C12N015/74.

☐ 5. 20020086821 . 17 Jan 01. 04 Jul 02. Nucleic acids, proteins, and antibodies. Rosen, Craig A., et al. 514/12; 435/183 435/320.1 435/325 435/69.1 536/23.1 A61K038/17 C07H021/04 C12N009/00 C12P021/02 C12N005/06.

☐ 6. 20020077287 . 11 May 01. 20 Jun 02. 28 human secreted proteins. Ruben, Steven M., et al. 514/12; 435/183 435/320.1 435/325 435/69.1 530/350 536/23.2 A61K038/17 C07H021/04 C12N009/00 C12P021/02 C12N005/06 C07K014/435.

☐ 7. 20020076756 . 11 May 01. 20 Jun 02. 28 human secreted proteins. Ruben, Steven M., et al. 435/69.1; 435/320.1 435/325 530/350 536/23.5 C12P021/02 C12N005/06 C07H021/04 C07K014/435.

☐ 8. 20020076705 . 30 Mar 01. 20 Jun 02. 31 human secreted proteins. Ruben, Steven M., et al. 435/6; 435/320.1 435/325 435/69.1 536/23.2 C12Q001/68 C07H021/04 C12N005/06 C12P021/02.

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☐ 10. 20020068319 . 08 Mar 01. 06 Jun 02. 32 human secreted proteins. Ni, Jian, et al. 435/69.1; 435/183 435/325 435/7.1 530/388.1 536/23.5 C12P021/02 C12N005/06 G01N033/53 C07H021/04 C12N009/00.

☐ 11. 20020064818 . 22 Feb 01. 30 May 02. 52 human secreted proteins. Ni, Jian, et al. 435/69.1; 435/325 435/6 435/7.1 536/23.1 C12P021/02 C12Q001/68 G01N033/53 C07H021/04 C12N005/06.

☐ 12. 20020061834 . 09 Feb 01. 23 May 02. Human G-protein Chemokine receptor (CCR5) HDGNR10. Rosen, Craig A., et al. 514/1; 435/320.1 435/325 435/69.1 530/350 536/23.5 A61K031/00 C07H021/04 C07K014/705 C12N005/06 C12P021/02.

☐ 13. 20020061521 . 17 Jan 01. 23 May 02. Nucleic acids, proteins, and antibodies. Rosen, Craig A., et al. 435/6; 435/69.1 514/2 530/300 536/23.1 C12Q001/68 C12P021/06 A01N037/18 C07H021/00

A61K038/00.

☐ 14. 20020048786 . 09 Feb 01. 25 Apr 02. Human G-protein Chemokine Receptor HDGNR10. Rosen, Craig A., et al. 435/69.1; 424/130.1 435/325 435/7.2 514/12 536/23.5 G01N033/53 G01N033/567 A61K038/00 C07H021/04 C12P021/06 A61K039/395 C12N005/02 C12N005/00.

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☐ 16. 20020026040 . 16 Jul 01. 28 Feb 02. 49 human secreted proteins. Moore, Paul A., et al. 536/23.1; 435/6 530/300 C12Q001/68 C07H021/02 C07H021/04 C07K002/00 C07K004/00 C07K005/00 C07K007/00 C07K014/00 C07K016/00 C07K017/00 A61K038/00.

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☐ 25. 6372473 . 04 Oct 99; 16 Apr 02. Tissue plasminogen activator-like protease. Moore; Paul A., et al. 435/212; 435/217 530/327 530/328 530/350 530/827 530/828. C12N009/48 C12N009/68 C07K007/09 C07K007/08 C07K004/12.

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